

## CLAIMS

1. An electrode comprising a carbon carrying a metal and a binder.

5

2. The electrode according to claim 1, which is formed on an electrically conductive substrate.

3. The electrode according to claim 2 wherein the electrically conductive substrate is made of glass, a polymer film or a metal.

10

4. The electrode according to claim 1 wherein the carbon is needle-like carbon, fullerene, carbon nanotube or electrically conductive carbon black.

15

5. The electrode according to claim 1 wherein the metal is at least one kind of metal selected from the group consisting of Pt, Ru, Co, Ti, Ni, Al and Au.

20

6. The electrode according to claim 1 wherein the specific surface area of the carbon is equal to or larger than  $100 \text{ m}^2/\text{g}$ .

25

7. The electrode according to claim 1 wherein the specific surface area of the carbon is equal to or larger than  $300 \text{ m}^2/\text{g}$ .

8. The electrode according to claim 1 wherein the amount of the metal carried by the carbon is equal to or more than 5 weight percent of the carbon.

5

9. A method of forming an electrode, comprising:  
forming a mixture of a carbon carrying a metal and a binder on an electrically conductive substrate.

10

10. A photoelectric transfer element comprising an electrode composed of a carbon carrying a metal and a binder.

15

11. The photoelectric transfer element according to claim 10 wherein a transparent conductive substrate and said electrode as a counter electrode are opposed to each other, and a semiconductor layer and an electrolyte layer are interposed between the substrate and the electrode.

20

12. The photoelectric transfer element according to claim 10 wherein the element is a dye-sensitized solar cell.

25

13. A method of manufacturing a photoelectric transfer element, comprising:  
forming an electrode by forming a mixture of a

carbon carrying a metal and a binder on an electrically  
conductive substrate.

14. An electronic device comprising an electrode  
5 composed of a carbon carrying a metal and a binder.

15. A method of manufacturing an electronic  
device, comprising:

forming an electrode by forming a mixture of a  
10 carbon carrying a metal and a binder on an electrically  
conductive substrate.